

**Notice of Allowability**

Application No.

09/864,817

Examiner

Elena Tsoy

Applicant(s)

CONSTANTINO ET AL.

Art Unit

1762

*eb*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to May 14, 2004.
2. ☒ The allowed claim(s) is/are 1-9 and 11-20.
3. ☒ The drawings filed on 24 May 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
(a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.  
(b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.  
(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____               | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

***Response to Amendment***

1. Amendment filed on May 14, 2004 has been entered. Claims 1-9, 11-20 are pending in the application.

***Comments on Statement of Reasons for Allowance***

2. Applicants' Comments on Statement of Reasons for Allowance filed on November 6, 2003 have been entered and considered. The Examiner agrees with Applicants that although Lilley does not expressly disclose a method that includes the steps of hydrothermally producing barium titanate-based particles, drying the particles and mixing the particles with a metal alkoxide in an alcohol thereby coating the particles with a metal oxide, Lilley, however, does not teach or suggest maintaining barium titanate-based particles in a wet environment between the steps of hydrothermally producing the particles and forming a coating on surfaces of the particles.

***Allowable Subject Matter***

3. **Claims 1-9, 11-20** are allowed.

The Examiner Note: claim 1, line 3, the phrase "maintaining the barium titanate-based particles in a wet environment" was interpreted according to the specification as filed (See pages 7, 8, and example 3) and according to applicants' statement in Remarks of May 6, 2003 (See paragraph 3 on page 3 of Remarks) as utilizing no drying step between formation of the barium titanate-based particles and coating the formed barium titanate-based particles so that the formed barium titanate-based particles are maintained in a wet environment before coating with a compound of at least one metal other than barium and titanium.

The following is an examiner's statement of reasons for allowance: the prior art of the record does not teach or suggest a method of claim 1 comprising hydrothermally producing barium titanate-based particles, and coating formed barium titanate-based particles with an oxide, hydrous oxide, hydroxide, or organic acid salt of at least one metal other than barium and titanium with no drying step between the steps of hydrothermally producing the particles and forming a coating on surfaces of the particles, i.e. maintaining the particles in a wet environment.

Closest prior art of Lilley et al discloses a method of coating hydrothermally produced barium titanate-based particles with a compound of at least one metal other than barium and titanium, but fails to teach the importance of not drying the produced barium titanate-based particles before coating. However, Applicants show that, in contrast to coating of previously dried barium titanate-based particles which results in strongly agglomerated particles that are not de-agglomerated by high shear mixing (See example 4), coating particles maintained in a wet environment results in coated particles, which, unexpectedly, can be de-agglomerated by high shear mixing (See example 3).

Claims 2-9, 11-20 are allowed as further limiting allowed claim 1.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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*Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (571) 272-1429. The examiner can normally be reached on Mo-Thur. 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'ETsoy', is positioned above the typed name of the examiner.

Elena Tsoy  
Primary Examiner  
Art Unit 1762

June 28, 2004